

SOME NOTES AND DESCRIPTIONS OF CERIOIDINE  
WASP-WAISTED FLIES (SYRPHIDAE, DIPTERA)<sup>1</sup>

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Several interesting studies of this unique group of flies have appeared in recent years. Since their publication I have discovered some new additions to the North American fauna, notes and descriptions of which I am presenting below together with new locality records of other species. I wish to thank Mr. H. J. Reinhard for permission to describe two species collected by him in South and Central Texas.

The strong similarity in appearance between these flies and certain wasps has caused frequent comment. The writer believes this similarity of aspect to be more accurately expressed from a lateral position than a dorsal one. The ever increasing number of discovered Cerioidine forms marks the group as a successful one for the present and one is inclined to wonder if in this case it may not actually be attributed to the mimicry of more aggressive types.

*Polybiomyia macquarti* Shn.

The Rio Grande Valley seems to be the home of this small slender form. I collected one male at Harlingen, Texas, June 29, 1921, flying about flowering grasses, and one male at Beeville, Texas, August 30, 1928, while resting on a leaf.

*Polybiomyia townsendi* Snow

One male. Las Cruces, New Mexico, July (F. M. Hull). On greasewood.

*Polybiomyia festiva* n. sp.

This species is characterized by the reddish color of the thorax and of the face. The markings resemble *P. town-*

<sup>1</sup>This paper is a contribution from the Plant Lice Laboratory of the Texas Agricultural Experiment Station.

*sendi*. Where the middle of the second segment of the abdomen in *townsendi* is uniformly red, it is red with a black median stripe in *reinhardi* and the median posterior section is also partially covered with punctate pollen.

Length, 14.5 mm. including antennæ. Female. Vertex yellow, tinged with reddish on every side; front from posterior ocelli to a sharp line just before antennifer reddish, continued narrowly along the median line to antennal prominence and with radiating rugosities in the middle anterior to the ocelli. Antennifer reddish, and this coloration continued from its base as a broad stripe down the face, a narrow one laterally to eye margins, and a stripe on either side of the face. A small black spot on either side of the antennifer above. Lower front and ground color of face yellow. Cheeks red; a black stripe proceeds obliquely from the eye margins two-thirds of the distance to the oral margin. The median red stripe of the face with a broad stripe of microscopic pubescence, thus leaving three slender, shining red stripes. Antennifer half the length of first joint of antennæ. First joint a little shorter than length of second and third combined and a little longer than the second joint alone. Style short. Entire antennæ reddish brown.

Thorax entirely reddish with a short black stripe on either side of the dorsum posteriorly and a shorter, transverse, black dash along the inner ends of the suture, a yellow spot on the humeri, just before the base of wing on mesopleuræ, sternopleuræ, and on the metapleuræ. Scutellum yellow. Halteres reddish. Squamæ pale brown.

Abdomen entirely dark brownish red save for a median black stripe on the posterior third of the second segment and a black tinge on the posterior corners and sides of the same segment. Pollen or pubescence of segments, especially punctate, and together with the lunulate markings quite conspicuous, and extending on to basal half of second segment. Posterior borders of second, third, and fourth segments shining reddish brown. Venter extensively shining black, on the sides reddish. Legs reddish, the sides of the hind femora more deeply and the bases of the tibiæ more yellow. Wings infuscated along anterior margin to tip of wing, the brown coloration reaching completely to

spurious vein and bordering the first posterior cell narrowly on its anterior margin. Spur or stigma present. In *P. townsendi* the infuscation does not reach into first basal and first posterior cells.

Type, a female. College Station, Texas, April 4, 1920 (H. J. Reinhard).

### *Polybiomyia reinhardi* n. sp.

This species is allied to *P. bellardi* Shannon. The posterior margin of the abdominal segments are reddish brown, not yellow, and the yellowish coloration of *bellardi* is consistently replaced by reddish brown. Moreover, the wings are infuscated heavily along their entire length to end of costa, the black of the face below antennæ reaches the margins of the eye laterally, etc.

Length about 19 mm. if the entire length from tip of curved abdomen to end of antenna be included. Female. Upper occiput and vertex swollen, tumid, light reddish brown becoming dark brownish red about ocelli and on the sides of the front above. Front brownish yellow on the sides, below with a rounded lobe of black protruding on either side from the middle; middle of front broadly shining black with short silvery pubescence. Face yellow, with a broad wedge-shaped black vertical stripe, extended at right angles just below antennæ in a bifurcate band to eye margins; a lateral oblique black stripe runs from oral margin to eye margin. Vertical median stripe with silvery pubescence medianly and laterally and oblique stripe with a narrow posterior border pubescent. Cheeks and the broad wide lower occiput reddish brown. Entire rim of oral margin black. Antennifer and antennæ reddish brown, the second joint nearly equal in length to the first; third joint half as long as second; style pale, conspicuously silvery pubescent, two-fifths as long as the third joint. Face and lower lateral front unique in bearing many small pimple-like bumps or papillæ bearing short setæ. Entire face and head shining as if varnished.

Thorax shining black with three obscurely indicated polinose vittæ, one broad median one and a very narrow one on either side. Humeri and a spot before the base of the

wing bright yellow. Pleuræ shining black without yellow markings, a brown spot on mesopleuræ, upper pteropleuræ and on the metapleuræ. Scutellum yellow with a narrow brown transverse band. Dorsum papillosetose with a transverse stripe along the suture, not connected medianly.

First abdominal segment dark reddish, with a black spot in the middle above and on either side and with a narrow posterior black border. Second segment black, on the sides and posteriorly dark red, anteriorly yellow; very much constricted. Remaining segments shining black with deep red posterior border and prominent gray pollinose lunules.

Legs shining red, the basal half of all the tibiæ becoming pale yellow, and the femora basally, paler in color. Halteres and squamæ brownish yellow. Wings dark brown on the whole anterior half the infuscation, reaching to the tip of wing or end of costa.

Type, female and three paratypes, females, Dilley, Texas, May 4-11, 1920 (H. J. Reinhard).

This interesting form is certainly related to *bellardi* in the pattern of the pleuræ, thorax, and abdomen. However, the several specimens of this species differ from that species in a number of points. Among them are the face with its papillosetæ and its peculiar bulges, and the ventral concavity of the abdomen with the unusual shape of the last two abdominal segments. Structurally it would appear nearest related to *schwarzi* Shnn. The shining, glossy black of *schwarzi* Shnn. renders that species abundantly distinct.

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## NOTES ON THE PREY OF WASPS

BY RICHARD DOW

The first three records are based on specimens in the collection of Dr. J. Bequaert, who has kindly permitted me to publish on his material. I am also indebted to Prof. N. Banks, Mr. C. W. Johnson, and Mr. Wm. T. Davis for assistance in determining specimens.